

B54368

Page 1

Work Order ID 54293-3

December 7, 2009 2:30:57 PM

Split



Accept



Setup

Start



Stop



Item ID: D412-769-043

Revision ID:

Item Name: Aft Facing Seat Assembly, LH

Start Date: 07/12/2009 Start Qty: 5.00

Required Date: 21/12/2009 Req'd Qty: 5.00

Reference:

Approvals: Process Plan:

QC:

Date: 9/12/12

Date:

Tooling:

SPC (Y/N):

Cust Item ID:

Customer:

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

HIN D412-769

Rev B

0.00

100

Pick Kit

0.00

Packaging

Memo

9/12/12

6/12/12

110



Small Fab

0.00

SB 10/01/12

③

Small Fab

Memo

0.00

Small Fab

1- assemble as per dwg D412-769-1

120



QC

0.00

⇒ SB 10/01/12

③
LW

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

Work Order ID 54293

December 7, 2009 2:30:57 PM



Accept

Item ID: D412-769-043

Setup Start

Revision ID:

Item Name: Aft Facing Seat Assembly, LH

Stop

Start Date: 07/12/2009 Start Qty: 5.00



Required Date: 21/12/2009 Req'd Qty: 5.00



Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130



Powdercoat

Powder Coating

Operation
Description

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

M112588

Set Up/
Run Hours

0.00

Draw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

START: 8:00 AM 10-01-13

Temp: 320°F

Fin: 8:30AM

0.00

0.00

140



QC

Quality Control

QC3- Inspect Part Finish

BK 10-01-13 (3) ✓

Memo

150



Packaging

Packaging

Pick Kit

0.00

0.00

S 10/01/13

Memo

Work Order ID 54293

December 7, 2009 2:30:57 PM



Item ID: D412-769-043

Accept



Setup Start



Stop



Revision ID:

Item Name: Aft Facing Seat Assembly, LH



Cust Item ID:

Start Date: 07/12/2009 Start Qty: 5.00



Customer:

Required Date: 21/12/2009 Req'd Qty: 5.00

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours
0.00Draw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



Small Fab

0.00

M-f 10/01/14 (2X)
 M-f 10/01/18 (1X)

0.00

0.00 => S. 10/01/18

Pro

170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00 => S. 10/01/18

180



Packaging

Packaging

Identify as per dwg & Stock Location: FG

0.00

MF 10-1-20

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
.	.						

Part No: D412-769-043 PAR #: Fault Category: Small Fab. NCR: Yes No DQA: Date: 10-01-28
 Resolution: Scrapp Disposition: re-work QA: N/C Closed: Date: 10-01-28

NCR: 54293		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/01/18	# 170	Found at inspection that a D3770-3 was damaged to fit P/L. It had a series of small dents. P.L. miss handling of parts/LOA	N/A	<ul style="list-style-type: none"> - Disassemble D3764-094 to remove D3770-3 D3770-3 + scrap - Pull D3770-3 from stock 400 D3770-3 1B5 #318 X 1 P/L AS PER QCS 2005 Grey Sandet 	10-01-20	S 10-1-28	N/A	S 10-01-18
		11122588 BATCH		<ul style="list-style-type: none"> TESTED 2450 ✓ STAB 320° ✓ Pin: 3.15 	10-01-19	S 10-01-22		S 10-01-18
			✓	<ul style="list-style-type: none"> - Re Assem with new hardware 				
				<ul style="list-style-type: none"> ANSI 11234 x 2 ANSI 113524 x 2 ANSI 1149503223 x 2 ANSI 9605010L x 2 equivalent as per QSB 17 	10-01-20	S 10-01-22	✓	S 10-01-18

NOTE: Date & initial all entries

Work Order ID 54293

Page 4

January 22, 2010 12:42:14 PM

Item ID: D412-769-043

Accept



Setup Start



Revisión ID:

Item Name: Aft Facing Seat Assembly, LH

Stop



Start Date: 12/7/2009 Start Qty: 5.00



Cust Item ID:

Required Date: 12/21/2009 Req'd Qty: 5.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

10/01/25 JJ

VMF 10-1-a2

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3-5A		Purchased	No			110	Each	2,043.000	30.0000		9/13/09	SP

Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	2043	
100188	188	
10505	1855	
	182.0000	10.0000
110	Each	

AN4-15A

Purchased No

Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	182	
113121	182	
	31.0000	5.0000
110	Each	

AN45-13A

Purchased No

EYE BOLT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	31	
109712	4	
111975	27	

Start Date: 07/12/2009

Start Qty: 5.00

Required Date: 21/12/2009

Required Qty: 5.00

9/13/09 SP

5 + 10 SB 10/01/09

9/13/09 SP

5 + 6 SB 10/01/09

9/13/09 SP

3 SB 10/01/09

Checklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch
		Purchased

ANS-10A



Bolt



Start Date: 07/12/2009

Start Qty: 5.00

Required Date: 21/12/2009

Required Qty: 5.00

Date Issued	Status
----------------	--------

Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued
110	Each	132.0000	30.0000	

a/b/a/b/c

SK

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse	132	
ST	8	
107013	2	
110363	1	
112314	38	
112933	50	
113149	33	
113255	2	
	252.0000	10.0000
Purchased	110	Each
No		

ANS-13A



Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse	252	
ST	3	
104936	8	
108167	14	
110363	10	
112492	17	
112641	200	
113237		

SB 10/01/07

a/b/a/b/c SK

SB 10/01/07

Shop Packet Print

December 7, 2009 2:31:01 PM

PICKLIST PRINT

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch
---------------------------------	------------------------	---------------

AN525-10R24



Screw



Start Date: 07/12/2009

Required Date: 21/12/2009

Start Qty: 5.00

Required Qty: 5.00

Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
			110	Each	146.0000	45.0000			

1113538 9/10/2009
M113538 83 10/01/07

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse		
ST	146	
109238	146	
	110	Each
	1,965.000	105.0000

9/10/2009 SP

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse	1965	
ST	8	
105442	2	
109059	23	
109840	2	
110139	202	
110985	5	
111279	64	
111668	645	
112314	14	
112369	1000	
113149		

63 83 10/01/07

Ticklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043



Start Date: 07/12/2009

Required Date: 21/12/2009

Parent Item Name: Aft Facing Seat Assembly, LH

Start Qty: 5.00

Required Qty: 5.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD416		Purchased	No			110	Each	2,311.000	20.0000		11113288 9110130	SF

Washer

MAS1169 JD 463T

~~JK~~

SB

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

ST	2311	
108161	329	
110523	340	
111279	101	
111916	482	
112314	1059	
16941	0	
		70
110	Each	1,016.000 100.0000

AN960JD516



Purchased No



aliboo SF

Washer

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

ST	1016	
110363	46	
110523	57	
111279	39	
112082	64	
112314	14	
112828	296	
113149	500	

60 SB 10/01/02

December 7, 2009 2:31:01 PM

Shop Packet Print

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:Component Item ID/
Item NameReplacement
Item IDMfg/
PurchBin
Item
NoPrimary
Location
ManufacturedLast
Location
NoRoute
Seq ID
110Unit of
Measure
EachQty on
Hand
7.0000Remaining
Qty To Pick
5.0000Qty
Issued

a113130

Start Date: 07/12/2009

Start Qty: 5.00

Required Date: 21/12/2009

Required Qty: 5.00

Date
Issued
Status

D3766-1



Front Rail, LH

Warehouse Loc Qty Loc CodeLocation

Main Warehouse

ST

 42872

7

7

Each

110

2

2

Each

2.0000

5.0000

a113130
SF

10/01/07

D3766-3



Rear Rail

Manufactured No

Warehouse Loc Qty Loc CodeLocation

Main Warehouse

ST

 42873

2

2

Each

110

13.0000

5.0000

a113130
SF

10/01/07

D3767-1



Upper Rail

Manufactured No

Warehouse Loc Qty Loc CodeLocation

Main Warehouse

ST

 42874 48488

13

3

10

a113130
SF

10/01/07

December 7, 2009 2:31:01 PM

Shop Packet Print

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293



Parent Item: D412-769-043



Parent Item Name: Aft Facing Seat Assembly, LH

Start Date: 07/12/2009

Required Date: 21/12/2009

Comments:

Start Qty: 5.00

Required Qty: 5.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3782-041



Front Inboard Leg Assembly

Manufactured

No

110

Unit of Measure	Qty on Hand	Remaining Qty To Pick
Each	4.0000	5.0000



9/12/30/08

D3782-043



Front Outboard Leg Assembly,LH

Manufactured

No

110

Unit of Measure	Qty on Hand	Remaining Qty To Pick
Each	3.0000	5.0000



9/12/30/08

D3782-045



Back Leg Assembly

Manufactured

No

110

Unit of Measure	Qty on Hand	Remaining Qty To Pick
Each	4.0000	10.0000



SB 10/01/08

Warehouse

Location

Main Warehouse

ST

42839

42840

110

Unit of Measure	Qty on Hand	Remaining Qty To Pick
Each	2	2



SB 10/01/08

December 7, 2009 2:31:01 PM

Shop Packet Print

Page 6

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:

**Component Item ID/
Item Name**

D3783-041

Lateral Brace Assembly
D3783-042

Longitudinal Brace Assembly
D3783-045

Angle Brace Assembly



Start Date: 07/12/2009

Start Qty: 5.00

Required Date: 21/12/2009

Required Qty: 5.00

D3784-041

Seat Support Assembly, Center

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		B 54331
		4

Main Warehouse
ST
42852
~~42854~~
42855

Loc Qty Loc Code

3.4.1. Measurements

ST 6

6

5

B 54332

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293



Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:Component Item ID/
Item NameReplacement
Item IDMfg/
PurchBin
Item
Primary
LocationLast
LocationRoute
Seq IDUnit of
MeasureQty on
HandRemaining
Qty To PickQty
Issued

Start Date: 07/12/2009

Required Qty: 5.00

Required Date: 21/12/2009

D3784-043



Seat Support Assembly, LH

Manufactured

No

B 54333



(3) SS 10/04/12

Date
Issued

Status

WarehouseLocation

Main Warehouse

ST

Loc QtyLoc Code

2

42864

1

42865

1

110

Each

2.0000

5.0000



D3784-044



Seat Support Assembly, RH

Manufactured

No

B 54334



(3) 10/04/12

JB

WarehouseLocation

Main Warehouse

ST

Loc QtyLoc Code

2

42867

1

42868

1

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293



Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:

Component Item ID/
Item NameReplacement
Item IDMfg/
PurchBin
ItemPrimary
LocationLast
LocationRoute
Seq IDUnit of
MeasureQty on
HandRemaining
Qty To PickQty
Issued

Start Date: 07/12/2009

Required Qty: 5.00

Date
Issued

Status

MS21042L3



Nut

110 2,759.000 45.0000

9/10/09 SP

MS21042L4



Nut

Purchased No

110 4,135.000 10.0000

9/10/09 SP

WarehouseLocation

Main Warehouse

ST

Loc Qty

Loc Code

109798	2759
110844	14
111274	32
111668	27
112314	194
112385	1992
	500

30 10/02/07

27

WarehouseLocation

Main Warehouse

ST

Loc Qty

Loc Code

110507	4135
111827	184
15924	3951
	0

8 10/02/07

6

December 7, 2009 2:31:01 PM

Shop Packet Print

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:Component Item ID/
Item NameReplacement
Item IDMfg/
PurchBin
Item
NoPrimary
LocationLast
LocationRoute
Seq IDUnit of
MeasureQty on
HandRemaining
Qty To PickQty
Issued

Start Date: 07/12/2009

Required Qty: 5.00

Required Date: 21/12/2009

Start Qty: 5.00

Status

Date
Issued

AN525-10R22



Screw

WarehouseLocation

H113524

Loc QtyLoc Code

39

SD

10/01/13

Main Warehouse

ST

110139

171

171

160

Each

5,439.000 65.0000

13



9/10/13

AN960JD10L



Washer

Purchased

No

WarehouseLocationLoc QtyLoc Code

Main Warehouse

ST

5439

101291

16

104885

153

105793

236

109632

276

110985

4758

160

Each

2.0000 5.0000

13

SD

10/01/13

D3774-1



Seat Bottom, LH/RH

Manufactured

No

WarehouseLocationLoc QtyLoc Code

Main Warehouse

ST

2

46065

2



3

SD

10/01/13

December 7, 2009 2:31:01 PM

Shop Packet Print

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293



Parent Item: D412-769-043



Start Date: 07/12/2009

Required Date: 21/12/2009

Parent Item Name: Aft Facing Seat Assembly, LH

Start Qty: 5.00

Required Qty: 5.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3774-3		Manufactured	No			160	Each	2.0000	5.0000			



Seat Back, LH/RH

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3774-3		Manufactured	No			160	Each	2.0000	5.0000			



Guard

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3775-1		Manufactured	No			160	Each	31.0000	10.0000			



Seat Belt Eye Bolt

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3792-1		Manufactured	No			160	Each	112.0000	15.0000			



Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
40880		Manufactured	No			160	Each	112.0000	15.0000			

December 7, 2009 2:31:01 PM

Shop Packet Print

Picklist Print

December 7, 2009 2:31:01 PM

Work Order ID: 54293

Parent Item: D412-769-043

Parent Item Name: Aft Facing Seat Assembly, LH

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch
MS21042L3		Purchased



Start Date: 07/12/2009

Start Qty: 5.00

Required Date: 21/12/2009

Required Qty: 5.00

Nut



MS21042L5



Nut

Purchased

No

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	2759	
109798	14	
110844	32	
111274	27	
111668	194	
112314	1992	
112385	500	
	15	
	750.0000	60.0000

9/10/30 SP

10/5/7 SS 10/01/07

9/10/30 SP

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	750	
110382	10	
111636	11	
112314	729	
	136	

SS 10/01/07

December 7, 2009 2:31:01 PM

Shop Packet Print

8

7

6

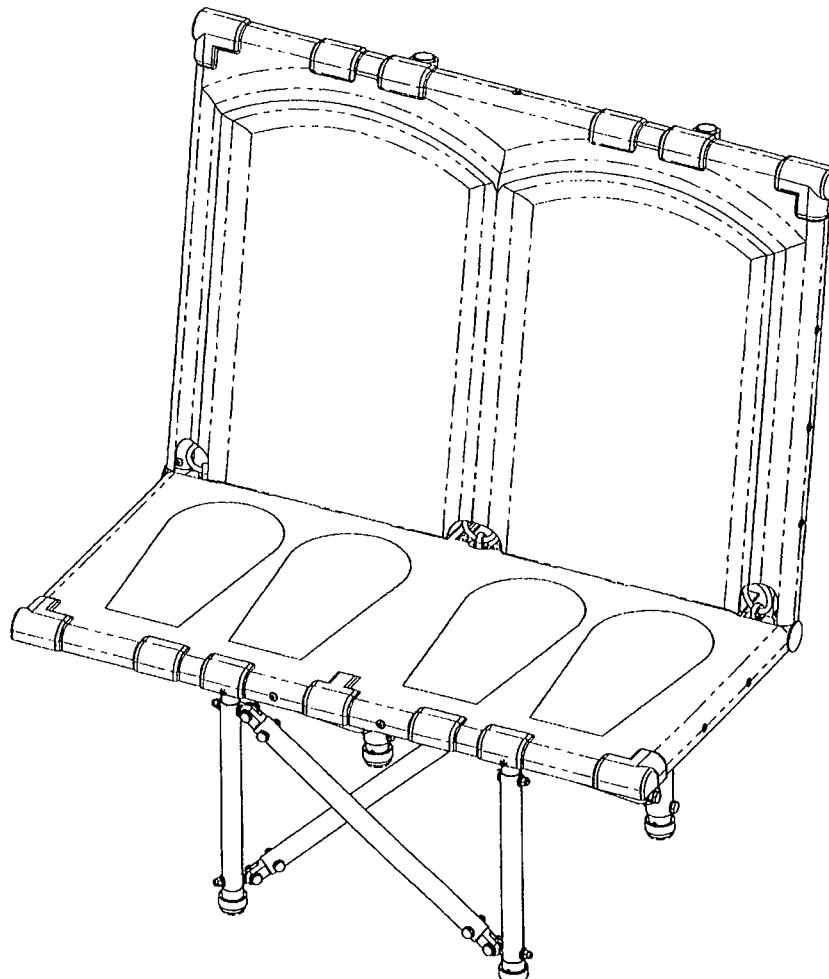
5

4

3

2

1



D412-769-043 AFT FACING SEAT ASSY, LH

RELEASED
58-07-07 MDO

B	NEW HARDWARE	HS	08.06.25
A	NEW ISSUE	HS	08.06.04
REV.	DESCRIPTION		
DESIGN	HS	DART AEROSPACE LTD	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AA	DRAWING NO.	REV. B
MFG. APPR.	AA	D412-769-1	SHEET 1 OF 7
APPROVED	MM	TITLE	SCALE
DE APPR.	AA	AFT FACING SEAT ASSY, LH	NTS
DATE	08.06.25	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8

7

6

5

4

3

2

1

D

C

B

A

8

7

6

5

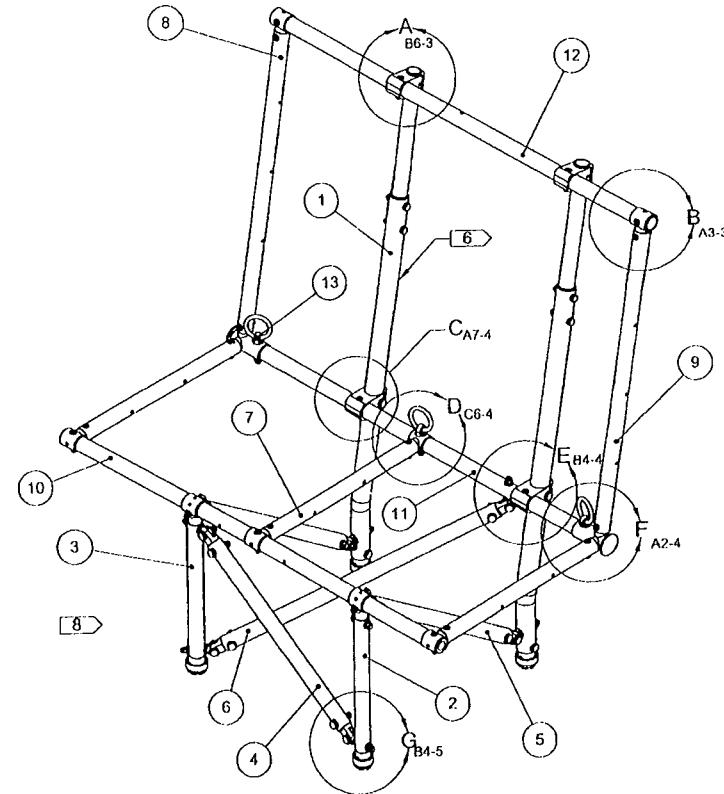
4

3

2

1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY. (-043)
1	D3782-045	BACK LEG ASSY	2
2	D3782-041	FRONT INBOARD LEG ASSY	1
3	D3782-043	FRONT OUTBOARD LEG ASSY, LH	1
4	D3783-041	LATERAL BRACE ASSY	1
5	D3783-043	LONGITUDINAL BRACE ASSY	2
6	D3783-045	ANGLE BRACE ASSY	1
7	D3784-041	SEAT SUPPORT ASSY	1
8	D3784-043	SEAT SUPPORT ASSY, LH	1
9	D3784-044	SEAT SUPPORT ASSY, RH	1
10	D3766-1	FRONT RAIL, LH	1
11	D3766-3	REAR RAIL	1
12	D3767-1	UPPER RAIL	1
13	D3792-1	SEAT BELT EYE BOLT	3
14	D3775-1	GUARD	2
15	D3774-1	SEAT BOTTOM	1
16	D3774-3	SEAT BACK	1
17	AN3-5A	BOLT	6
18	AN4-15A	BOLT	2
19	AN45-13A	EYE BOLT	1
20	AN5-10A	BOLT	6
21	AN5-13A	BOLT	2
22	AN525-10R22	SCREW	13
23	AN525-10R24	SCREW	9
24	MS21042L3	NUT	28
25	MS21042L4	NUT	2
26	MS21042L5	NUT	12
27	NAS1149D0332J	WASHER (AN960JD10L)	13
28	NAS1149D0363J	WASHER (AN960JD10)	21
29	NAS1149D0463J	WASHER (AN960JD416)	4
30	NAS1149D0568J	WASHER (AN960JD516)	20

B
B

D412-769-043 AFT FACING SEAT ASSY, LH

RELEASED
08.07.09/14

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT ASSEMBLED SEAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3 PRIOR TO INSTALLATION OF SEAT BOTTOM/BACK (D3774-1/-3). MASK FRONT LEGS PRIOR TO POWDER COAT.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH D2729-1 RED DECAL ATTACHED TO BACK LEG ASSEMBLY (D3782-045)
- 7) WEIGHT: 30.0 lbs
- 8) ITEM 15 (D3774-1 SEAT BOTTOM) AND ITEM 16 (D3774-3 SEAT BACK) REMOVED FOR CLARITY

DESIGN	HS	DART AEROSPACE LTD	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>ED</i>	DRAWING NO. REV. B	
MFG. APPR.	<i>ED</i>	D412-769-1	
APPROVED	<i>ED</i>	SHEET 2 OF 7	
DE APPR.	<i>ED</i>	TITLE	SCALE
DATE	08.06.25	AFT FACING SEAT ASSY, LH NTS	

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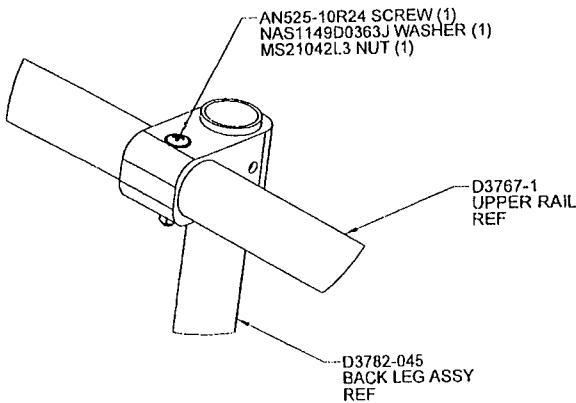
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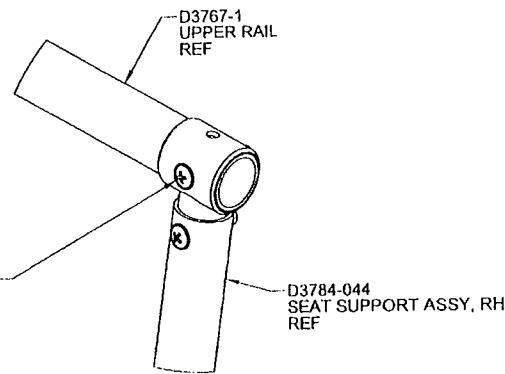
C

B

A



DETAIL A D2-2
UPPER RAIL TO BACK LEG ATTACHMENT
2 PL



DETAIL B C1-2
SEAT SUPPORT END ATTACHMENT
5 PL

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08.06.25

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MFG. APPR.	MP	REV. B
APPROVED	MP	D412-769-1
DE APPR.	MP	SHEET 3 OF 7
DATE	08.06.25	TITLE
		AFT FACING SEAT ASSY, LH
		SCALE
		NTS

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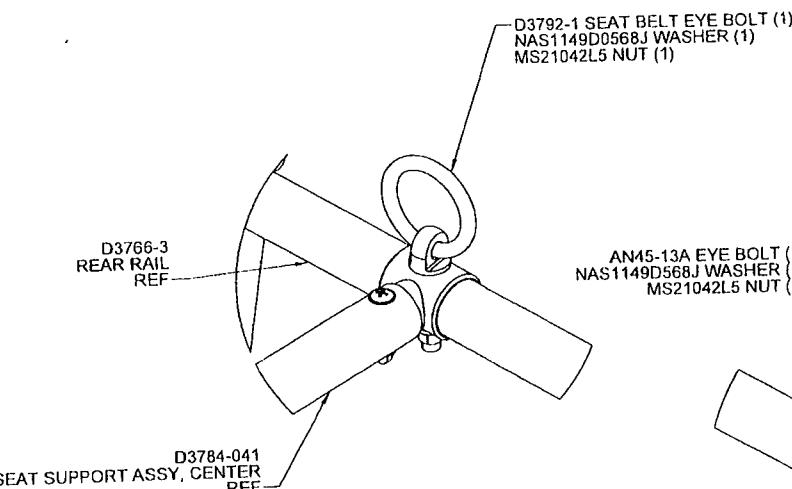
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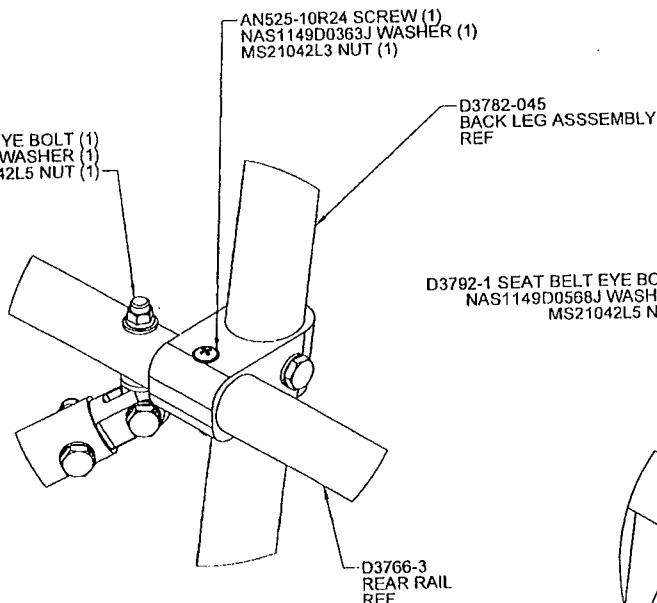
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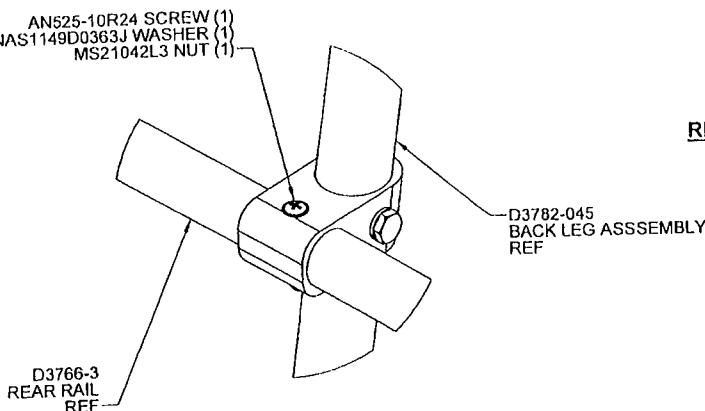
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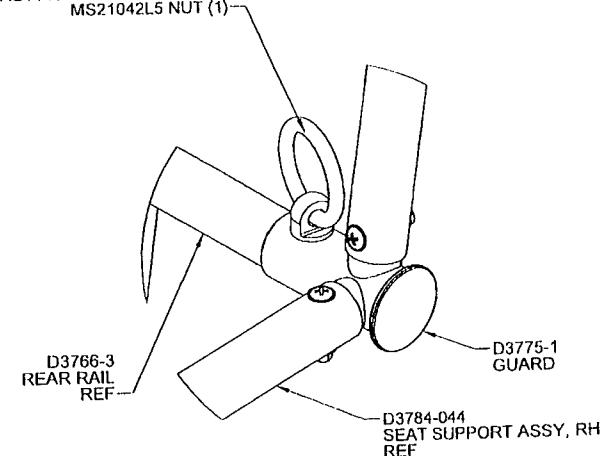
DETAIL D C2-2
SEAT SUPPORT ASSY, CENTER ATTACHMENT



DETAIL E C1-2
REAR RAIL TO BACK LEG ATTACHMENT



DETAIL C C2-2
REAR RAIL TO BACK LEG ATTACHMENT



DETAIL F B1-2
SEAT SUPPORT ATTACHMENT

DESIGN	HS	DART AEROSPACE LTD	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>ea</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>AS</i>	D412-769-1	SHEET 4 OF 7
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.	<i>AS</i>	AFT FACING SEAT ASSY, LH	NTS
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08.06.25

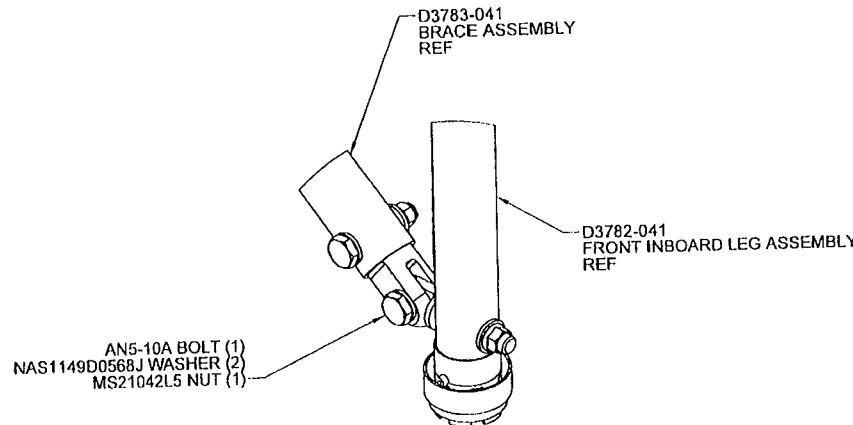
8 7 6 5 4 3 2 1

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C

B

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DETAIL G_{B2-2}
BRACE ATTACHMENT

6 PL

RELEASED
04.07.07 MPA

DESIGN	HS	DART AEROSPACE LTD	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>AS</i>	D412-769-1	SHEET 5 OF 7
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.	<i>AS</i>	AFT FACING SEAT ASSY, LH NTS	
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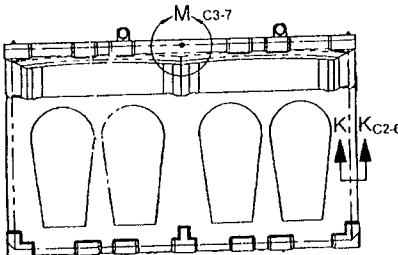
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AN525-10R22 SCREW (1)
NAS1149D033J WASHER (1)
MS21042L3 NUT (1)
3 PL PER SIDE

D3784-044
SEAT SUPPORT, RH
REF

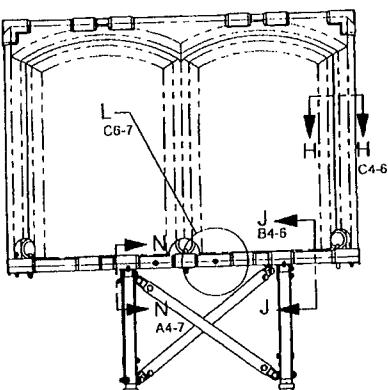
AN525-10R22 SCREW (1)
NAS1149D033J WASHER (1)
MS21042L3 NUT (1)
2 PL PER SIDE

D3774-1
SEAT BOTTOM
REF

D3774-3
SEAT BACK
REF

SECTION K-K_{b7-6}
D3784-044
SEAT SUPPORT, RH
REF

SECTION H-H_{b7-6}



D3766-1
FRONT RAIL
REF

D3774-1
SEAT BOTTOM
REF

D3766-3
REAR RAIL
REF

3
AN3-5A BOLT (1)
NAS1149D0363, WASHER (2)
MS21042L3 NUT (1)
6 PL

SECTION J-J_{a7-6}

11/03/08
RELEASED
108 07-07-107

DESIGN	HS	DART AEROSPACE LTD	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ps	DRAWING NO.	
MFG. APPR.	NV	D412-769-1	REV. B
APPROVED	MF	SHEET 6 OF 7	SCALE
DE APPR.	MF	TITLE	NTS
DATE	08.06.25	AFT FACING SEAT ASSY, LH	

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NOTES:
1) TRANSFER DRILL Ø.201 FROM SEAT SUPPORTS (D3784-043/-044) TO SEAT BACK (D3774-3) - 3 PL/SIDE

2) TRANSFER DRILL Ø.201 FROM SEAT SUPPORTS (D3784-043/-044) TO SEAT BOTTOM (D3774-1) - 2 PL/SIDE

3) TRANSFER DRILL Ø.201 FROM SEAT BOTTOM (D3774-1) TO SEAT BACK (D3774-3) - 6 PL

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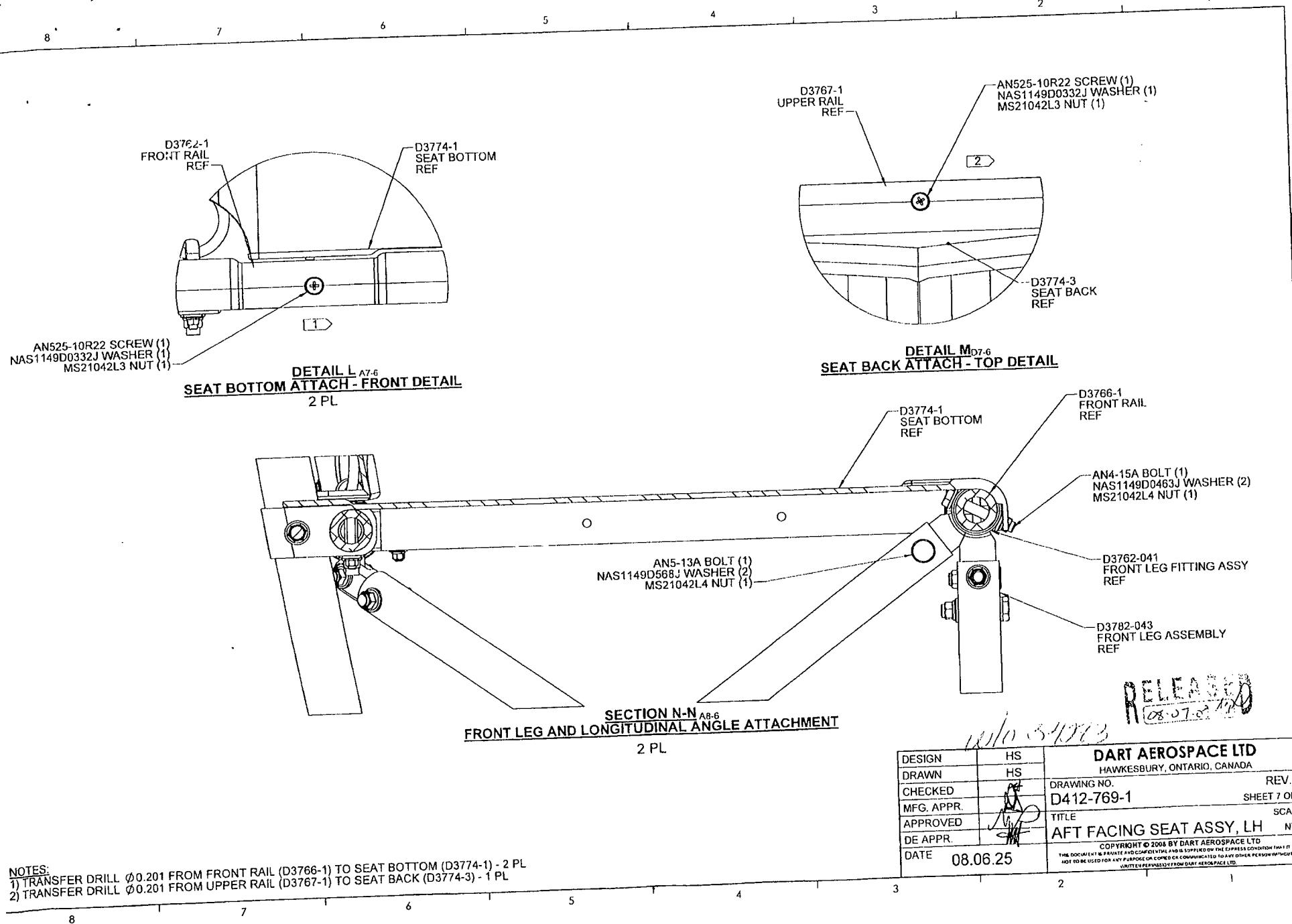
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Custom Work Orders Requisition

Page 1 of 1

Work order No.: 54299 / 54294

Pick list

Note: Material pick list must be pre-approved by

Dept. Head: JM Date: 10.01.12

8

Purchasing: _____ Date: _____

Close work order	By:	Date:
------------------	-----	-------

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3

REF TCCA STC: SH04-7

REF FAA STC: SR01997NY

REF EASA STC: EASA.IM.R.S.00710

PURPOSE:

Update the D412-702-041A/045A/-041B/-045B kits for compatibility with the Dart D412-769-011 Aft Facing Seat Kit.

CHANGE:

Quantity (1) each of D412-702-111A/-113A is replaced with D412-702-121A/-123A. Also Qty (4) x AN4-27A bolts are added to the kits for compatibility with the Dart seat. When installing the AN4 bolts in the Dart seat, open the Ø0.188" holes to Ø0.257" (see sheet 4 detail J of this service instruction for reference). Alternate nuts added (see flag note 2 & 3, sheet 4). The parts list in section 25.28 (pg. 87) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 38) of IIN-D412-702 Rev. E is amended as follows:

QTY -041A	QTY -043A	QTY -045A	QTY -047A	QTY -049A	PART NUMBER	DESCRIPTION
X					D412-702-041A	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045A	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1	1			D412-702-111A	HARNESS ASSEMBLY (EXISTING)
1	1			D412-702-121A	HARNESS ASSEMBLY (NEW)
1*	1*			D3570-3	BRACKET
1*	1*			D3579-043	SHOULDER HARNESS
4*	4*			MS24694S50	SCREW
4*	4*			AN960JD10L	WASHER
1*	1*			MS21042L3	NUT
1*	1*			D3569-1	DECAL
1	1			D412-702-113A	HARNESS ASSEMBLY (EXISTING)
1	1			D412-702-123A	HARNESS ASSEMBLY (NEW)
1*	1*			D3570-4	BRACKET
1*	1*			D3579-044	SHOULDER HARNESS
4*	4*			MS24694S50	SCREW
4*	4*			AN960JD10L	WASHER
1*	1*			MS21042L3	NUT
1*	1*			D3569-2	DECAL
4	4			AN4-27A	BOLT (NEW)

WAS:

2	2			D412-702-111A	HARNESS ASSEMBLY
2	2			D412-702-113A	HARNESS ASSEMBLY

* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

ADD FLAG NOTES 2 AND 3

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE: 09.12.10	
CERT. NO.: SH04-7	
ISSUE NO.: 3	

B	ADD NOTE TO OPEN AN3 HOLES TO AN4		CP	09.11.10
A	NEW ISSUE, NCR 09-068		CP	09.06.30
REV.	DESCRIPTION		BY	DATE
DESIGN	9P		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN				
CHECKED	9P		DRAWING NO.	REV. B
MFG. APPR.	N/A		DSI 9469	SHEET 1 OF 5
APPROVED			TITLE	SCALE
DE APPR.			AFT-FACING SEAT UPDATE	NTS
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The parts list in section 25.28 (pg. 93) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 40) of IIN-D412-702 Rev. E is amended as follows:

QTY -041B	QTY -043B	QTY -045B	QTY -047B	QTY -049B	PART NUMBER	DESCRIPTION
X					D412-702-041B	Dart 13-Man 3-Point Shoulder Harness Kit
	X				D412-702-045B	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1	1			D412-702-111B	HARNESS ASSEMBLY (EXISTING)
1	1			D412-702-121B	HARNESS ASSEMBLY (NEW)
1*	1*			D3570-3	BRACKET
1*	1*			D3579-047	SHOULDER HARNESS
4*	4*			MS24694S50	SCREW
4*	4*			AN960JD10L	WASHER
1*	1*			MS21042L3	NUT
1*	1*			D3569-3	DECAL
1	1			D412-702-113B	HARNESS ASSEMBLY (EXISTING)
1	1			D412-702-123B	HARNESS ASSEMBLY (NEW)
1*	1*			D3570-4	BRACKET
1*	1*			D3579-048	SHOULDER HARNESS
4*	4*			MS24694S50	SCREW
4*	4*			AN960JD10L	WASHER
1*	1*			MS21042L3	NUT
1*	1*			D3569-3	DECAL
4	4			AN4-27A	BOLT (ADD)

WAS:

2	2			D412-702-111B	HARNESS ASSEMBLY
2	2			D412-702-113B	HARNESS ASSEMBLY

* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01
APPROVED
BY: _____
D. SHEPHERD (DE # 02)
DATE: 09.12.10
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN	9P	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED	9P	DRAWING NO. REV. B DSI 9469
MFG. APPR.	N/A	
APPROVED		TITLE SCALE AFT-FACING SEAT UPDATE NTS
DE APPR.		
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Figures 4.8 (pg. 25) of IIN-D412-702 Rev. E and 25.12 (pg. 69) of ICA-D412-702 Rev. 3 are updated as follows:

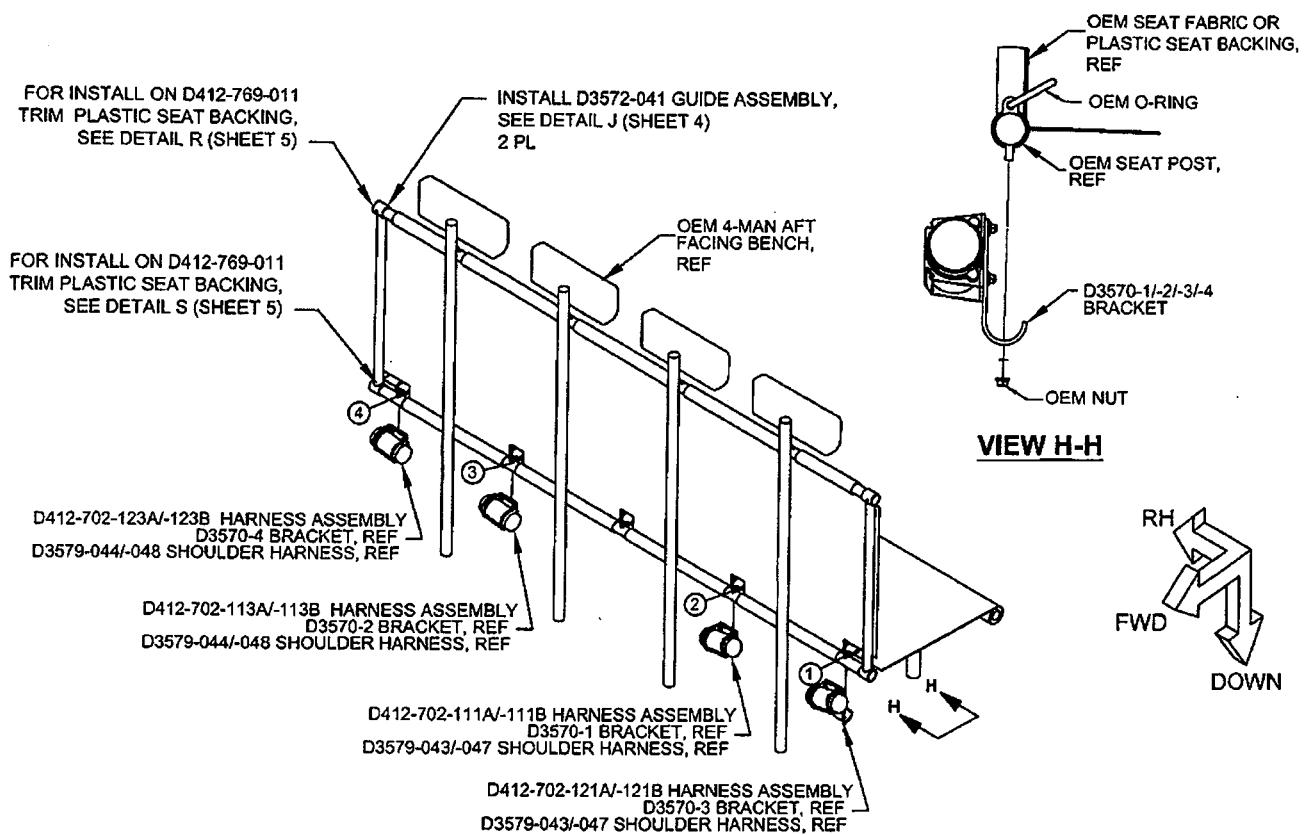
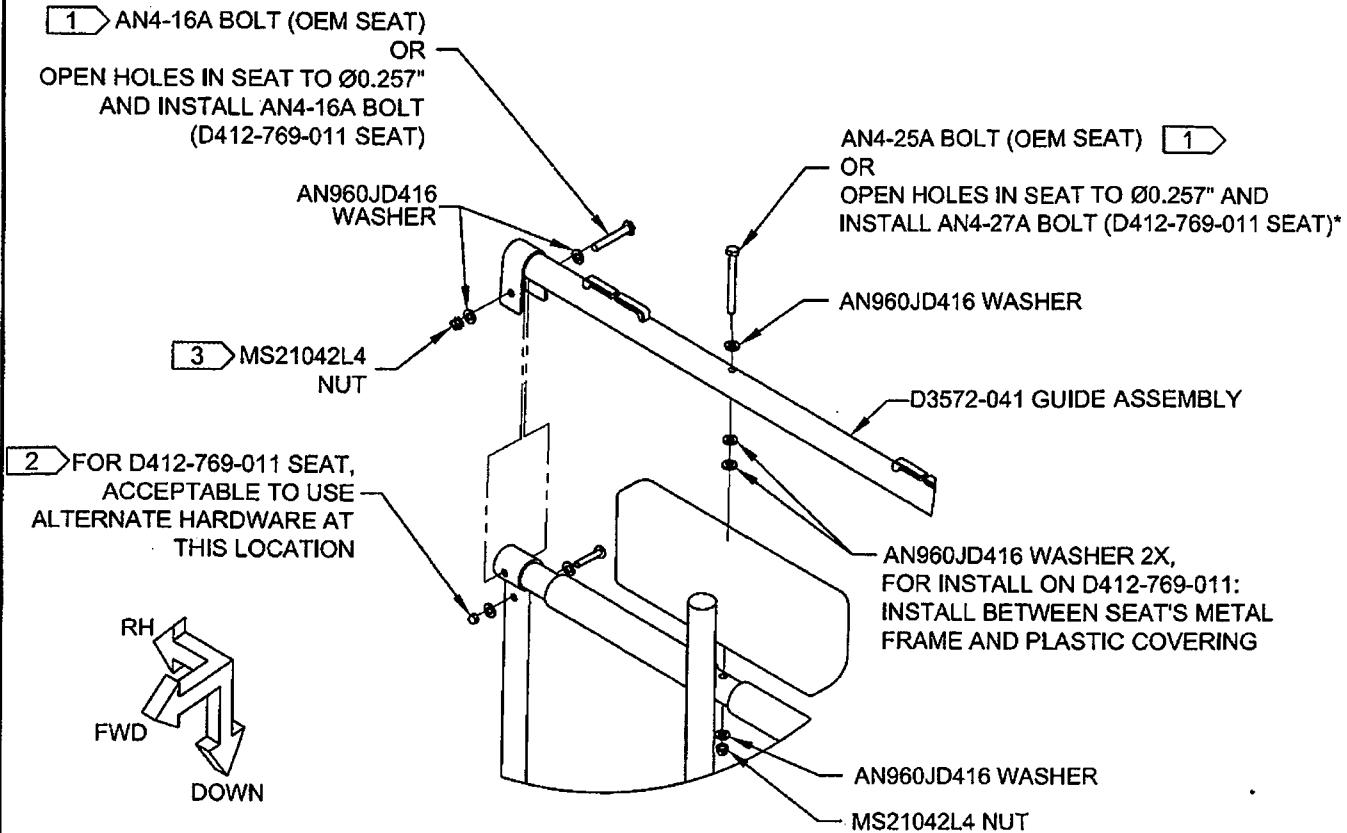


FIGURE 4.8. SHOULDER BELT INSTALLATION
FIGURE 25.12 D412-702-045A/-045B 4-MAN 3-POINT AFT FACING SHOULDER HARNESS KIT

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.12.10
CERT. NO.:	SH04-7
ISSUE NO.:	3

DESIGN	QP	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	QP	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9469	SHEET 3 OF 5
APPROVED		TITLE	
DE APPR.		AFT-FACING SEAT UPDATE	
DATE	09.12.10	SCALE NTS	

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DETAIL J: D3572-041 INSTALLATION
(RH SHOWN, LH OPPOSITE)

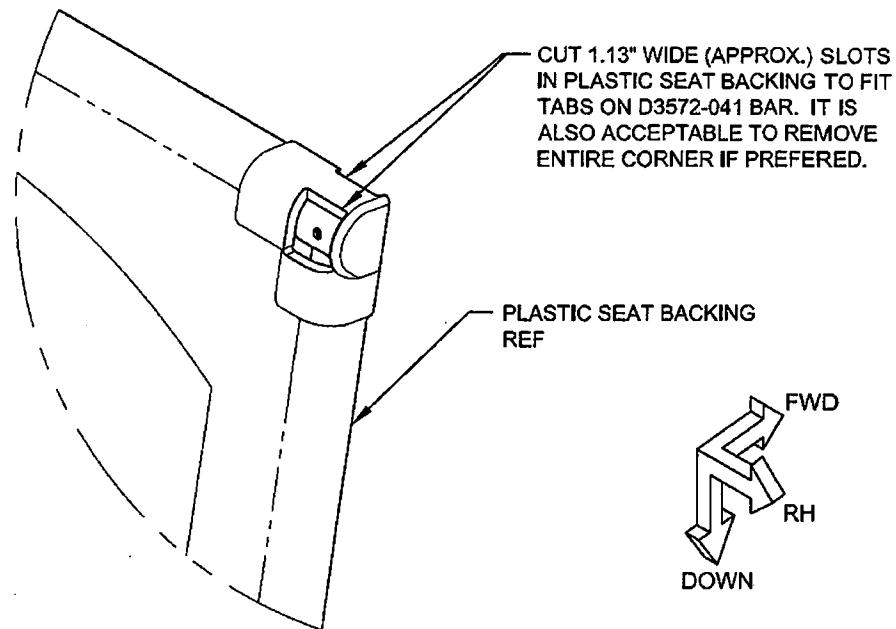
1 ACCEPTABLE TO USE LONGER/SHORTER AN4 BOLTS,
ADD ADDITIONAL AN960JD416 WASHERS, OR SUBSTITUTE
AN960JD416L WASHERS TO ENSURE 1.5-2 THREADS IN SAFETY

Additional AN960JD416/10L
WASHERS ON THE NUT SIDE }
2 ACCEPTABLE TO USE MS51865-6C AS ALTERNATE NUT. IF ALT NUT IS
USED, ADD ONE (1) AN960JD416 WASHER (HEAD BOLT SIDE)
TO ENSURE PROTRUDING THREADS MEASURE 0.16 MIN, 0.19 MAX.
(BEFORE NUT INSTALLATION)

Additional AN960JD416/416
WASHERS ON THE NUT SIDE }
3 ACCEPTABLE TO USE MS51865-8C AS ALTERNATE NUT. IF ALT NUT IS
USED, ADD ONE (1) AN960JD416 WASHER (HEAD BOLT SIDE)
TO ENSURE PROTRUDING THREADS MEASURE 0.20 MIN, 0.25 MAX.
(BEFORE NUT INSTALLATION)
ADD ONE (1) ADDITIONAL AN960JD416 WASHER IF REQUIRED.

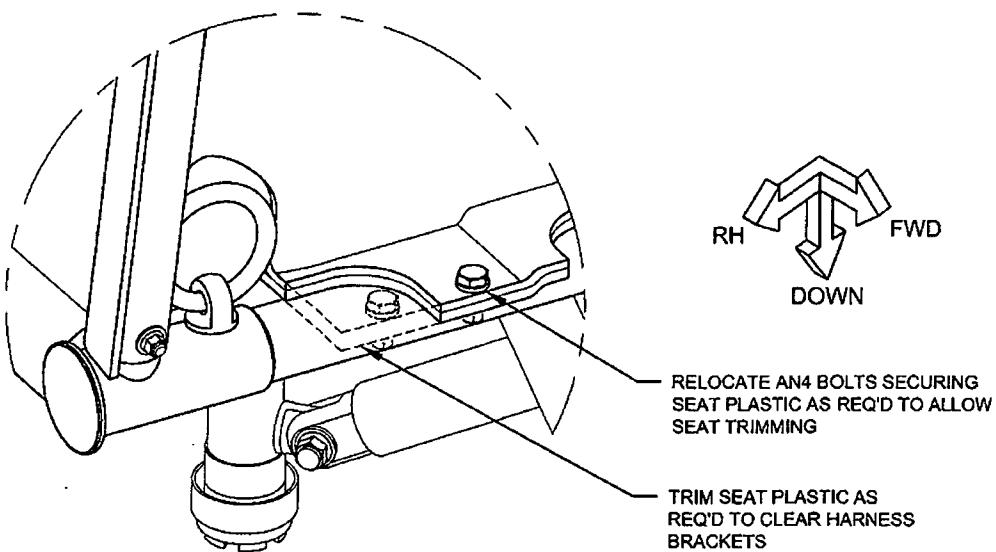
CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.12.10
CERT. NO.:	SH04-7
ISSUE NO.:	3

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MFG. APPR.	N/A	DSI 9469	SHEET 4 OF 5		
APPROVED		TITLE			
DE APPR.		SCALE			
DATE	09.12.10	AFT-FACING SEAT UPDATE			
		NTS			
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DETAIL R

VIEW LOOKING AT FRONT OF SEAT BACKING, TOP-RH CORNER SHOWN (TOP-LH CORNER SIMILAR),
FOR INSTALL ON D412-769-011 ONLY



DETAIL S

VIEW LOOKING AT REAR OF SEAT, BOTTOM-RH CORNER SHOWN (BOTTOM-LH CORNER SIMILAR),
FOR INSTALL ON D412-769-011 ONLY

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.12.10
CERT. NO.:	SH04-7
ISSUE NO.:	3

DESIGN	90	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	90	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9469	SHEET 5 OF 5
APPROVED		TITLE	
DE APPR.		AFT-FACING SEAT UPDATE	
DATE	09.12.10	NTS	
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